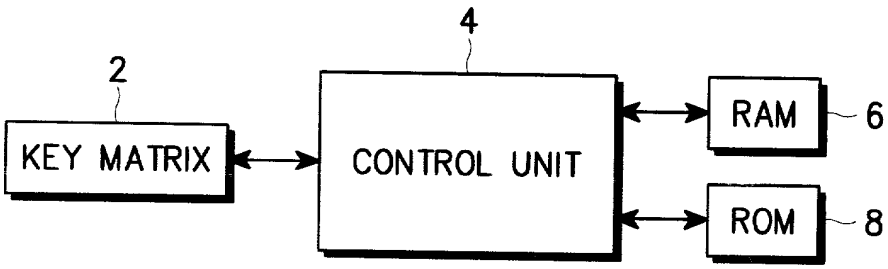

FIG. 1

FIG. 2

	b5	b6	b7	b8	b9
b0	key[0][0]	key[0][1]	key[0][2]	key[0][3]	key[0][4]
b1	key[1][0]	key[1][1]	key[1][2]	key[1][3]	key[1][4]
b2	key[2][0]	key[2][1]	key[2][2]	key[2][3]	key[2][4]
b3	key[3][0]	key[3][1]	key[3][2]	key[3][3]	key[3][4]
b4	key[4][0]	key[4][1]	key[4][2]	key[4][3]	key[4][4]

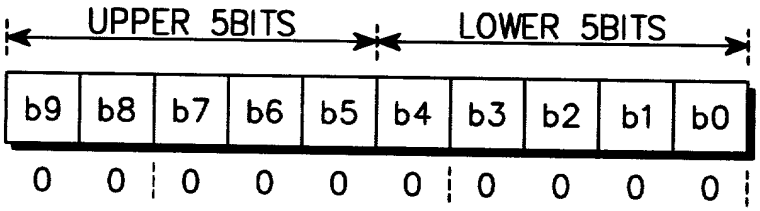
UPPER 5BITS
LOWER 5BITS
b9
b8
b7
b6
b5
b4
b3
b2
b1
b0
0
0
0
0
0
0
0
0
0
0

FIG. 3

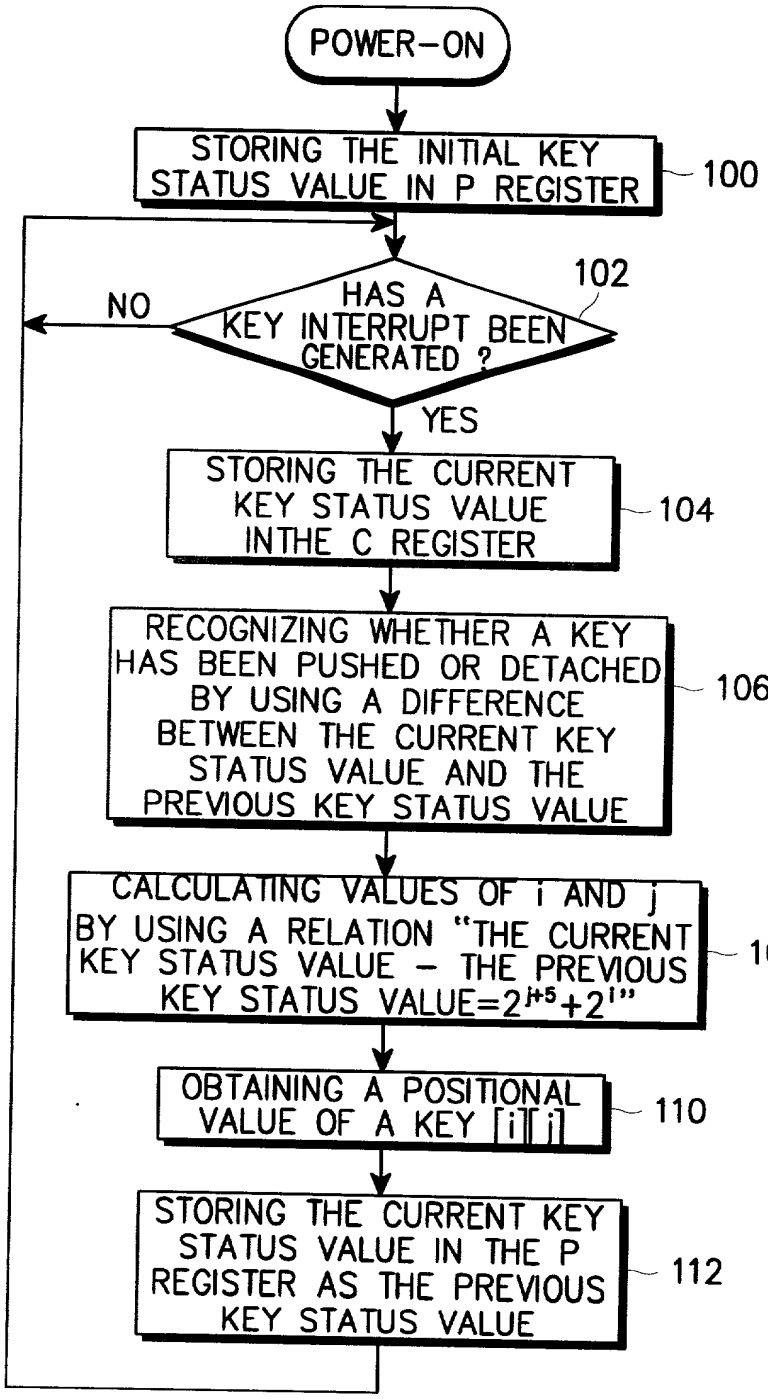
POWER-ON
STORING THE INITIAL KEY STATUS VALUE IN P REGISTER
100
HAS A KEY INTERRUPT BEEN GENERATED ?
102
NO
YES
STORING THE CURRENT KEY STATUS VALUE INTHE C REGISTER
104
RECOGNIZING WHETHER A KEY HAS BEEN PUSHED OR DETACHED BY USING A DIFFERENCE BETWEEN THE CURRENT KEY STATUS VALUE AND THE PREVIOUS KEY STATUS VALUE
106
CALCULATING VALUES OF i AND j BY USING A RELATION "THE CURRENT KEY STATUS VALUE - THE PREVIOUS KEY STATUS VALUE=2^(i+5)+2^i"
108
OBTAINING A POSITIONAL VALUE OF A KEY [i][j]
110
STORING THE CURRENT KEY STATUS VALUE IN THE P REGISTER AS THE PREVIOUS KEY STATUS VALUE
112

FIG. 4